

**REMARKS**

Examiner O. Rojas is thanked for the thorough examination and search of the subject Patent Application. Claims 2, 4-8, 24, 34-37, and 49-50 have been amended, Claims 1, 13-23, 26-30, 31-33, 40-48, and 51-53 have been canceled, and new claims 54-81 have been added. No new matter has been added.

The making final of the restriction requirement is noted. Non-elected claims 13-23, 26-30, 40-48, and 51-53 are hereby canceled. Applicant reserves the right to file a divisional application to the non-elected claims.

The Examiner is thanked for finding allowable material in claims 2-4, 9-12, 24, 25, 32-34, 38, 39, 49, and 50. Claim 1 has been canceled and Claim 2 has been rewritten in independent form including all limitations of the base claim 1. Claim 31 has been canceled and Claim 34 has been rewritten in independent form including all limitations of the base claim 31. Claims 32 and 33 have

New independent claim 56 combines canceled claim 1 and the allowable material from claim 24. New dependent claims 57-68 are similar to dependent claims 2-12 and 25. New independent claim 69 combines canceled claim 1 and the allowable material from claim 10. New dependent claims 70-81 are similar to dependent claims 2-12, 24, and 25.

All Claims are believed to be in condition for Allowance, and that is so requested.

Reconsideration of the rejection under 35 U.S.C. 102(e) of Claims 1, 5-8, 31, 35, and 36 as being anticipated by Chan et al is requested in view of Amended Claims 2, 4-8, and 34-37 and in accordance with the following remarks.

Claim 2 has been rewritten in independent form to include all the limitations of canceled claim 1. It is agreed with the Examiner that Chan et al does not teach that the optical substrate is a wafer comprising a plurality of die, wherein each die comprises at least one passive optical component and wherein the electronic substrate is a wafer comprising a plurality of die, and wherein each die comprises at least one active electronic component.

Claim 34 has been rewritten in independent form to include all the limitations of canceled claim 31. It is agreed with the Examiner that Chan et al does not teach that the electronic substrate comprises a photodetector device, wherein the optical substrate transmits an optical signal, and wherein a vertical waveguide transmits the optical signal through the electronic substrate to the photodetector device.

The amendments to the claims are believed to make the claims patentable over Chan et al.

Reconsideration of the rejection under 35 U.S.C. 102(e) of Claims 1, 5-8, 31, 35, and 36 as being anticipated by Chan et al is requested in view of Amended Claims 2, 4-8, and 34-37 and in accordance with the remarks above.

Reconsideration of the rejection under 35 U.S.C. 102(e) of Claims 1, 31, 35, and 37 as being anticipated by Saia et al is requested in view of Amended Claims 2 and 34-37 and in accordance with the following remarks.

Claim 2 has been rewritten in independent form to include all the limitations of canceled claim 1. It is agreed with the Examiner that Saia et al does not teach that the optical substrate is a wafer comprising a plurality of die, wherein each die comprises at least one passive optical component and wherein the electronic substrate is a wafer comprising a plurality of die, and wherein each die comprises at least one active electronic component.

Claim 34 has been rewritten in independent form to include all the limitations of canceled claim 31. It is agreed with the Examiner that Saia et al does not teach that the electronic substrate comprises a photodetector device, wherein the optical substrate transmits an optical signal, and wherein a vertical waveguide transmits the optical signal through the electronic substrate to the photodetector device.

The amendments to the claims are believed to make the claims patentable over Saia et al.

Reconsideration of the rejection under 35 U.S.C. 102(e) of Claims 1, 31, 35, and 37 as being anticipated by Saia et al is requested in view of Amended Claims 2 and 34-37 and in accordance with the remarks above.

Applicant has reviewed the prior art made of record and not relied upon, specifically US 6,984,544, and agrees with the Examiner that while it is of general interest, it does not apply to the detailed claims of the present invention.

Allowance of all Claims is requested.

It is requested that should Examiner Rojas not find that the Claims are now Allowable that the Examiner call the undersigned at 765 4530866 to overcome any problems preventing allowance.

Respectfully submitted,

A handwritten signature in black ink, appearing to be 'SBA', with a long horizontal flourish extending to the right.

Stephen B. Ackerman, Reg # 37,761